

a Freeman

JOURNAL

OF THE

BRITISH SOCIETY OF DOWSERS

Vol. III. No. 21

September, 1938

CONTENTS

	Page
Notices	209
Some Dowsing Experiences . . .	210
The Summer Meeting	213
The Mischievous Rock	214
Meeting of the Scottish Branch . . .	219
Finding a Brooch	220
An Experimental Investigation . . .	222
Some Notes on " Point Depthing " . .	235
Water Divining	235
The Radial Detector	239
The Pendul-Radioscope	242
Notes and News	249

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BRITISH SOCIETY OF DOWSERS

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OBJECTS OF THE SOCIETY

(a) To encourage the study of all matters connected with the perception of radiation by the human organism with or without an instrument.

(b) To spread information amongst members, by means of a journal, lectures and other means, about the use of dowsing for geophysical, medical and agricultural and other purposes and for tracing objects animate or inanimate.

(c) To keep a register of dowsers for water, minerals, oil, and for other purposes.

RULES OF THE SOCIETY

I.—Membership.

The Society is open to all persons interested in radiation-perception.

The Council has power to appoint honorary members.

II.—Subscription.

The subscription is five shillings per annum, or three guineas for a life member.

III.—Management.

The Society will be managed by a Council consisting of a President, who will act as Chairman, and five members, one of whom will act as Treasurer and Secretary.

The President and members will be replaced as necessary by the Council, appointments being confirmed at a General Meeting.

All questions regarding the publication of the journal, lectures, meetings, etc., will be settled by the Council.

Decisions of the Council will be arrived at by correspondence if necessary, the facts being recorded in the Minute Book.

Decisions will be decided by a majority vote, the Chairman having a casting vote.

The Council has power to co-opt other members for special purposes.

IV.—Accounts.

The financial year will be from July 1st to June 30th.

Accounts will be published annually within two months after the end of the financial year.

Accounts will be audited privately.

V.—General Meeting.

A General Meeting will be held annually, and other meetings when considered necessary by the Council.



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NOTICES

Members are reminded that subscriptions for the year July 1st, 1938, to June 30th, 1939, **are now due.**

To avoid unnecessary clerical labour, it will be assumed that members who have not paid their subscriptions by November 15th do not wish to continue their membership, and no Journals or communications will be sent to them after that date.

* * * * *

We have been notified that a "Congrès International de Radiesthésie" will be organised in connection with the "Exposition Internationale de l'Eau" at Liège in May-November, 1939. It will include three sections: biological, mineralogical and military. Our members are invited to attend this Congress and to suggest subjects for discussion. Further details can be obtained from the Editor.

* * * * *

We much regret to record the death of Dr. Adolph Selige, N.D., M.R.S., of Miami, Florida, on June 29th. He was a leader in the U.S.A. of the diagnosis and treatment of disease by radiesthésie, and founded the League of Radioscopic Research and Practice. He was a contributor to our Journal on several occasions. By his death the cause of this new and enlightened form of medical practice has suffered a great loss.

* * * * *

Mumetal rods for "point depthing" are supplied by the Telegraph Construction and Maintenance Co Ltd. Their usual price for a rod is £2 10s., but they have undertaken to supply them at £1 10s. each for an order of a dozen. Any member desiring to purchase a rod is requested to notify the Editor as early as possible.

* * * * *

Angle rods with a swivel handle can be obtained from Messrs. Windley Bros., Crown Works, Chelmsford, for 6s. 6d. post free to any address in England.

* * * * *

Messrs. Devine and Co., St. Stephen's Road, Old Ford, London, E.3, supply pendulums of whale ivory, with central suspension and cavity for sample, at the price of 6s., and other dowsing instruments.

They also supply whalebone for rods cut to size.

The Society's badges can be obtained from the Honorary Treasurer at 1s., and rosewood pendulums at 3s.

* * * * *

Communications for the Editor, and inquiries, should be sent to Colonel A H Bell, York House, Portugal Street, London, W.C.2.

SOME DOWSING EXPERIENCES

By Captain H. I. HALLIDAY

During the last four or five years I have had a certain amount of varied experience as a Professional Diviner for both water and minerals in England, Canary Isles, Arabia and America, working independently and for various firms — British and American.

In England I was engaged on a number of occasions for water work, chiefly in East Anglia, where I reside, and most of which was successful. One bore only is possibly worthy of mention because it showed one aspect of divining which proved to be very useful.

I was asked to fix the site of a bore for a comparatively small amount of water, the bore being six inches in diameter. The area had to be in a coal yard, if possible, and since there was a quantity of water in the chalk which might be termed "sheet," it seemed easy, but there was one difficulty—iron pyrites. At a certain depth there was a great deal of iron pyrites which had prevented no less than two or three previous bores being put down successfully. My job was to select a site and give a guarantee that no obstruction would be encountered. I found the area honey-combed with the stuff, but after a very careful survey I pegged out an exact site, and the result was satisfactory—and the water was obtained at last.

The Canary Isles provided some interesting work of an entirely different type. In Teneriffe, the island I worked in, the local inhabitant had a curious way of going to work to provide water for irrigation work. Usually a number of friends in the village argued that water was required. It would be decided that boring should be done and that the syndicate formed should pay the cost. The first difficulty was the site. This was either settled by tradition, *i.e.*, tradition held that some site had a spring near the surface or that some time water flowed there; or, more usually, one of the syndicate, claiming to special knowledge of local conditions, fixed the site. In ninety-nine cases out of a hundred both were useless.

The boring is done horizontally into the hill-side by means of a gallery in the hope of striking a supply. The gallery is usually big enough to accommodate a trolley, and a number of them have compressed air pipes for drills and occasionally a fan.

To give an idea of the tenacious way they bore and the faith they have in finding water, I traversed one gallery which was started before the war and which was over a mile and a quarter long and bone dry. Over a million pesetas had been spent on it to no purpose, and I venture to add that had a diviner been called in originally the whole sum might have been saved for a better site.

My plan was to examine a number of galleries, select the best and work on it. The method of working was to drive a side gallery commencing exactly over a fissure and follow the same fissure by keeping exactly over it until it would be met, since the stream followed the contour of the hill in its flow. The main difficulty was explosives, which would crack the rock and dissipate the stream in the fissure. Anyway, the revolution in Spain began and my hopes ended. Some day I would like to try again.

My next work was to proceed to Arabia on behalf of a large mining concern to find water for a minefield. A number of bores had been put down with no practical result. A Swedish geologist had been engaged with an electrical method of detecting an underground supply, and he was destined to give up the undertaking and pass his opinion that no water was available.

I was asked in the London office of the concern if I thought water was available, and in front of the Directors I map-dowsed and gave three areas where I considered water could be found; this was in an area of about four miles square. I was sent out three weeks later. I have done a good many years in the Tropics and nearly two years in Arabia, but never have I felt such heat as I experienced at Port Sudan and Arabia during that July and August. I had a trip of over two hundred miles by car by day from the Port, and one of three of us who made that trip died on the way of heat stroke. We ran out of petrol some miles from our destination, and my companion and I sat and watched him die powerless to help.

On the way out I dowsed over some panoramic views of the mine and actually fixed the site of the bore, which was eventually put down after working in situ. I personally believe that a very great deal of map dowsing could be done off aerial survey maps to great advantage, especially as a preliminary for finding likely areas or ore bodies.

At the mine area I did all my exploration by car, dowsing from the same, and had the great advantage of having the Mining Engineer, who had done the survey, as my guide and chauffeur. Before commencing work I again map dowsed in the mine office on the morning after my arrival, in front of him,

and we took each of the three areas in turn. Sure enough I got my deep fissures each rising out of a hill, in each area. I sited one site on each of the first two and two sites on the third, making four sites in all. I could find no more water for a radius of ten miles around. Two of these sites only were bored and both yielded water. This goes to prove the value of map dowsing as a preliminary survey—and, possibly, of a dowser over a geologist!

Last year I was asked to go to the other side of the Atlantic to see if I could locate any new ore bodies for a large lead, zinc and copper mine belonging to an American firm. Unfortunately, I had no good maps to work over beforehand, so I was unable to do any preliminary work. However, I was lucky in the location of the mine, as I will show. I found within half-a-mile of the mine a hill when it was possible to get a clear view of the surrounding country for many miles. I was given a complete set of maps to work on, and I spent the best part of several days on the top of that hill working with compass, maps, and my rod. It was one of the best chances of prospecting from a distance I have ever had. From a number of deposits I picked on five—the furthest five miles or so away and the nearest some three miles away—and marked these down on my map. I was then ready to test out my work. I was given a young Mining Engineer as guide, and we went straight through bogland and forest, guided by my rod only, to each location in turn. I picked up each site, and he plotted them out on his map with the aid of a Brunton. Each area was then triangulated and mapped to large scale.

It is interesting to note that when we returned to headquarters and superimposed our locations over my findings from the top of the hill I was only four hundred yards out in the worst instance and dead correct in two cases. In the mine area itself I found some forty small deposits.

As may be expected, with such facilities, I did not lose the chance of tests for ore dowsing at the mine. I found my location work good, but my coefficient for depth work as used for water, which was very accurate for the same, erratic for minerals.

A few remarks as to methods may be of interest. I use invariably a whalebone rod, eight to nine inches in length, bound at the end with adhesive plaster, flat but of somewhat greater thickness than usual. For water I find no samples necessary. For minerals I use samples of pure ore and have a collection of some fifteen or sixteen different samples. As most dowsers know, it is necessary to orient oneself and face in the proper direction when dowsing for minerals in order to get exact location, and it must not be forgotten that the radiations travel along the dip and not perpendicular. Incidentally I find that metals vary not between 0° and 180° but round the whole 360° . When it is necessary to dowse for a complex ore I get a sample from the area, either from the mine or outcrop.

For depth I use a tabulated scale with my own coefficient worked vertically as recommended by the Vicomte de France. It took me two years to tabulate that scale over a large number of known bores, and I find I can get to a very small percentage of error at any workable depth. I have used the point depth method with a mumetal rod, but find that it is too slow in difficult country, though very accurate and an excellent check if required.

Volume, I am afraid, is my own method, and impossible to describe. Its accuracy is fairly reliable. One point I would like to make in passing. In the case of water, when a heavy pull is exerted on the rod it does not mean a large volume of water. It does mean a fast flow. I proved this over a large number of open and closed aqueducts in Teneriffe, where usually the quantity of water passing through was known accurately.

Lastly, may I stress the point that every dowser who takes up the work seriously should keep an accurate account, with every possible detail of conditions prevalent, of the work he does; only thus can he rectify the mistakes made.

THE SUMMER MEETING

The Summer Meeting was held this year on Saturday, July 16th, at Tyringham House (near Newport Pagnell, Buckinghamshire), the grounds of which Mr. F. A. Konig had kindly placed at our disposal for the afternoon.

In spite of the day being cloudy, with intermittent rain, members and their friends assembled to the number of about 100.

Demonstrations were given of the use of three different divining instruments. Major Pogson explaining the use of the motorscope, Major Merrylees the forked rod and Mr. J. Cecil Maby the angle rod.

Teas and ices were provided in a marquee on one of the lawns.

Mr. Konig very kindly opened the exquisite Temple of Music, and arranged for an organ recital to be given there by Mr. C. Kenneth Garratt, of Newport Pragnall.

As is usual at our Summer Meetings, members made good use of the opportunity for discussion and exchange of experiences.

The unfriendly weather prevented a full appreciation of the beauties of the charmingly laid-out gardens, and no one felt inclined to examine the large and attractive bathing pool from the midst of its contents.

Nevertheless, the Meeting can be considered to have been a distinct success.

Our thanks are due to Mr. and Mrs. Konig for their kindness and hospitality and to Mr. A. Bullard for making all local arrangements.

THE MISCHIEVOUS ROCK (MR) IS IT RADIO-ACTIVE?

By J. A. MITCHELL

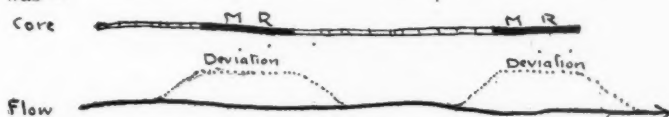
For many years past it has been necessary for me to study the Trap rocks, known generally as "Deccan Trap." It is used extensively in roads, buildings and concrete—in the last in the form of sand, water-worn shingle and broken rock. It varies widely in composition and texture; generally it is basic, and ranges in structure from practically glass to holocrystalline material; consequently its suitability for the employment proposed must be checked, chemically, physically and under the microscope. It is entirely volcanic, having welled (sub-airially) from long fissures, and spread unconformably over the land, long and short (speaking geologically) periods intervening between the pourings. Geologists have proved it at one time covered about 500,000 square miles; now, as the result of denudation, it occupies on the surface some 200,000 square miles. The effect of this difference in surface area on the efforts of the dowser will be gathered from what follows.

Several years ago water had been obtained from a bore, the site for which I had marked, and I was asked to return and test over the rest of the property (a large area) for other sites. Two were located; one for a bore, the other, where several small flows converged, for an open well to be sunk to 40 feet. Some months later I was informed the bore had been sunk to nearly twice the depth advised, but beyond a little water not far below the surface none had been obtained. On visiting the property I found the bore had been sunk at the open-well site and nothing done at the other. Examination of the core showed wide difference in its quality. Inquiry elicited that at 60 feet below the surface a dense, black rock had been met and continued for about 100 feet. The bore had gone some 40 feet below this, through rock of the type normal to the neighbourhood.

A short distance from the bore were coolie lines, and the youngsters had scattered the core, but had arranged some of it in a roughly straight line about 40 yards away in the up-stream direction.

Beginning about 100 yards up-stream from the bore, the flows located previously were re-tested. The indications again gave them as about 40 feet down (evidently runs-off from the higher ground in the neighbourhood). When testing one flow, which ran within a few feet and almost parallel to the displaced pieces of core, deviations, not noted in the original test, towards portions of the core were found. The new line was pegged and a check test made, this time working up-stream; the results were the same. Examination of the pieces of core lying adjacent to the

deviations showed in every case the pieces to consist of the hard, black rock; where "normal" rock lay there was no difference from the original test. Diagrammatically the position was—



Further tests later in the day showed the deviations again, but to a different extent (subsequently this was found to be due to the altered position of the sun). Then the pieces of black rock were removed to a substantial distance, and a test made one hour later showed the deviations to have disappeared, all indications giving the "line" found some months earlier. It became evident the black crypto-crystalline rock was "mischievous," and that the finding of any water at all in the bore was due to luck and not to dowsing.

Pieces were brought to the laboratory, and over many months numerous experiments were made with it. During this period rocks having the same "malicious" influences were collected from different localities, all within the Trap area. With these, also, hundreds of tests have been made and checked as far as is possible by one working alone.

I believe the rock to be radio-active, but as yet have not been able to prove this by any tests accepted generally by scientists. Here, in India, there seems to be no one capable of making such a test. One piece failed to discharge an electroscope, but that, I think, points merely to the activity being insufficient; certain it is this MR behaves in the same way as proved radio-active materials. With my method of using written "samples" radium, thorium and actinium have been indicated; one rock answers to both radium and actinium.

So far as I have been able to observe, MR occurs in the form of dykes and sills intruded into the Trap beds. They may or may not reach the surface. If they are visible a little experience enables one to decide whether a certain dyke is probably "mischievous," and tests can be made. It is those still buried that are especially dangerous; their unrealised existence within the area under examination results in false readings; unbeknown to the dowser they indicate minerals not present, and displace those of any underground flow of water, and, throughout the full trap area at least, precautions should be taken either by testing for MR before seeking the mineral wanted, or, having secured indications of the latter, checking the readings. Some of the problems encountered and the methods which, *with myself*, appear successful in solving them, are dealt with below; it is possible the same methods may not operate with others.

The following tests under "A" and "B" were carried out in the laboratory with specimens of MR ranging in weight from under an ounce to several pounds. The metals, &c., tried included platinum, gold, silver, copper, tin, zinc, lead, nickel, bismuth and antimony, most of them both as metals and in ores, diamond, sapphire, beryl. In all the tests the area of the metal, &c., was a small percentage only of that of the MR.

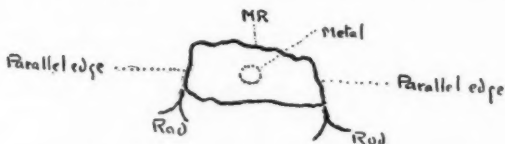
Table Tests.—A plain wooden table covered with newspaper was used. I sat on a wooden chair in which no metal exists, placed the metal on the table and the MR on top of it within easy reach of the point of the rod.

Ground Tests.—The metal and MR were placed on a concrete floor with the MR covering the metal as in the table tests.

Approaching.—In the table tests this began some 18 inches from the MR, and in the ground tests any distance up to 40 feet.

A.—Using Rod only.—

- (a) *Mineral absent.*—The rod is "dead" both when approaching and when over the MR. (From "normal" rock reactions are obtained).
- (b) *Mineral present.*—From a distance (approaching) the rod is "dead" to both MR and mineral; over, reaction is obtained from the mineral at the edges of the MR parallel to the rod, but nowhere over the MR, nor along its edges perpendicular to the point of the rod.



B.—Using Rod with "Sample."—Metal, mineral, precious stone.

- (a) *Mineral absent.*—The rod indicates the material to be present throughout the whole area of the MR, both when approaching and when over it.
- (b) *Mineral present.*—Both when approaching and when over the MR reaction is obtained only at the edges parallel to the point of the rod, *i.e.*, in line with and then vertically below.

The reactions are completely misleading. In test "B" (a) (mineral absent) metals, minerals and precious stones are all indicated; in "B" (b) (mineral present) the MR may occupy an extensive area beneath the surface. The reactions indicate two separate deposits (one right, one left), when, actually, only one may exist and within only a small portion of the area.

From either test bores and diggings result in failure and another black mark is placed against Dowsing.

After the long period of trial and checking I now believe the influence of the MR can be nullified and correct indications secured. The tests were carried out mainly in the laboratory, but when there appeared to be reasonable proof that the MR had been controlled, tests were made in the field, both over water and with minerals, by taking MR to the sites where they exist and placing it on the ground.

To detail the experiments would serve no useful purpose. They were directed first to methods that would locate and identify MR; this can be done as follows. (It is necessary to have several small pieces of MR for use as "samples").

1. *To find whether MR is in the vicinity.*—Two pieces of MR are carried in one hand—they must not touch each other—and one piece in the other. Searching with the rod in the usual way it will move when pointing towards MR and continue to do so in approaching, but action ceases when over it.

2. *To find whether MR is vertically below.*—One piece of MR is carried in each hand. The rod moves once over any one part, *i.e.*, moving over an MR area the rod will continue to dip, but stops when remaining in the same place. Before reaching and after leaving the area there is no movement.

(In either test the "samples" may be carried in the pockets of one's clothes; the two pieces in one pocket should be wrapped separately in paper).

It seems immaterial whether or not the "mischievous" element (or elements) in the sought-for rock is identical with that of the "sample." I have found rock indicated as containing thorium secures that indicated as containing radium or actinium, and vice versa.

These readings, obtained first in the laboratory, have been checked in the field.

Magnet.—Another method of ascertaining the presence of MR is by using a magnet (in these tests it was a powerful horse-shoe type).

At a distance.—The magnet is placed before one and the rod held over it. The magnet is then turned a few degrees at a time, care being observed to leave no gaps, round the compass; if no movement of the rod occurs it may be accepted no MR exists within influencing distance; directly MR is in line with the two poles, the rod dips strongly.

Over.—No matter what the position of the dowser may be relative to the poles the rod will dip for MR. This is a rapid means of determining whether or not a rock is "mischievous" (? radio-active); so far, I have found that normal traps, granite, quartz, schists, &c., placed between the poles are dead.

Being able, apparently, to locate and define the area of MR itself (See 1 and 2 above), the next step was to try and rectify the misleading indications noted under "B" above.

"Sample," plus MR in the hand or pocket.

Material absent.—No indication either from a distance or over.

Material present.—Both from a distance and over, the material is indicated throughout the whole area of the rock; actually, in the tests, it occupied less than 5 per cent. of the area. If more than one piece of MR is carried all action ceases.

I tried many combinations with the metal "sample," but failed to delimit the metal, and it seemed it could not be done. Previously, I had used the written "sample" in locating individuals (persons), and in one or two other directions. Some of the results obtained with it when used to "fight" MR are given below; it will be well, however, to describe first the method of use by myself.

Perhaps the easiest way of doing so is to select one metal as typical of all metals, minerals, precious stones, &c.; take NICKEL. A piece of white paper of size sufficient to permit writing the word NICKEL clearly, is used. Hold out the right hand with the palm underneath, place the paper against the base of the index finger with the writing uppermost (as though it is to be read through the hand), then take the rod with one stem in contact with the paper and proceed in the usual way. With myself the written "sample" will not operate with the writing in any other position. (I may state I use my left hand when working with the pendulum, and it is possible others may find it necessary to place the written "sample" in the left hand). If "normal" rock only is concerned, and the written "sample" used, the rod will move when pointing towards a deposit of nickel and when over it, while with a metal "sample" the rod is dead over the deposit. In contact with the written "sample," as with metal, the rod is unaffected by other materials.

Working with the written "sample" within the influence of MR.

Written "sample" only.

(a) *Metal absent.*—There is no movement of the rod either when directed towards or over any part of the area.

(b) *Metal present.*—The rod moves when directed towards or over any part of the area.

(Reference to "B" above will show the difference in the reactions when a metal "sample" is used).

Written "sample," plus MR "sample."

(a) *Metal absent.*—There is no movement of the rod either when directed towards or over the MR.

(b) *Metal present.*—The metal is indicated correctly both from a distance and over it.

This method has been checked in the field by laying minerals on outcrops of MR and covering them with it; the reactions are the same as those obtained in the laboratory.

Water.—The above tests were made on "minerals," using the term narrowly—not to include water. So far as was noted, the position of the sun had no appreciable effect; it does not appear to act in conjunction with or against the MR.

When testing for underground flows with a "sample" (water), in the neighbourhood of MR the results are bewildering. Say a flow has been located and pegged over a distance at 9 a.m., if tested at intervals during the day the indications will occur at a different site each time. With sun and MR on the same side of the flow the "pull" is strong, and the width of the displacement of the indications varies with the angle of the sun from the line of flow. When they are on opposite sides of the flow, the displacement is narrower, but varies; in all cases the flux-of-force zone is reduced.

If the flow is vertically below, above, or lying in MR, two flows will be indicated, one on each of the sides of the MR parallel to the line of flow.

In no case have I obtained the correct position when using a coloured or plain rod alone, in conjunction with a water "sample," or with the addition of one or more MR "samples."

Too much has been written above to permit describing the tests made over water, but as the result of the numerous experiments and checkings carried out both in the laboratory and the field I believe the evil influences of the MR are checkmated.

This has been written in the hope that it may be of some interest, and, further, that some explanation of the reactions may be given by others.

MEETING OF THE SCOTTISH BRANCH

The Summer Meeting of the Scottish Branch of the British Society of Dowsters was held this year on the 23rd of July, at the historic old house of Maryculter, Aberdeenshire, the residence of Captain and Mrs. Guy Innes.

A company of about a hundred members and their friends attended the meeting, many of whom came from a considerable distance. Beautiful weather contributed to the success of the gathering.

In the absence of Sir George Abercromby, President of the branch, Mr. C. T. Cox, of Inchmarlo, presided. Various apologies were read from those unavoidably prevented from being present.

The Hon. Secretary submitted the Statement of Accounts. Captain Innes welcomed the guests on behalf of Mrs. Innes and himself.

The principal speaker was Captain W. H. Trinder, who is recognised as one of the leading authorities on Dowsing, and is an original member of the B.S.D.

Much interest was aroused by his address, "The Influence of Colour on Dowsing," which was a new aspect of the subject to many of those present.

Captain Trinder was followed by Colonel Irvine Fortescue, who gave a short history of Maryculter. He said that the beautiful oak-panelled hall in which the company were assembled was built by the Knights Templar in the 12th century, and that according to legend secret passages were said to exist between Maryculter house, the Parish Church of Peterculter (on the site of which their monastery stood) and Eastlands House. After a sumptuous tea, kindly provided by Captain and Mrs. Innes, the dowsers set out to locate those passages, carrying with their rods empty glass bottles, to act as samples. However, nothing was found to indicate the presence of the lost tunnels except faults and small cavities in the rocks and strata.

The success of the afternoon was the location of two streams of water near the main entrance to the grounds, where it is proposed to build a lodge. Some difference of opinion was expressed as to the estimate of the depth at which the water would be struck.

These meetings, besides being enjoyable outings, afford the members an opportunity for meeting, exchanging experiences and discussing their difficulties.

Captain and Mrs. Innes were heartily thanked for their kindness.

FINDING A BROOCH

By W. W. HAWKER

A friend asked me to locate water on his property on Yorke's Peninsula in South Australia. His mother was the greatest sceptic imaginable; she scoffed at anyone finding water underground, and told me plainly it was nonsense.

I asked her if she would like a practical demonstration. Take these three two-shilling pieces, and place them together in one of your shell-covered paths, in your garden, and then the rod will show you how they can be found. She immediately said, "Oh, you will look where I have hidden the money, and then

just go to the place, and say the rod told you where to go." Her daughter said, "I will take Mr. Hawker to a back room, and blindfold him; when you have hidden the money call us"; which she did in ten minutes. It took me less than five minutes to find the coins, but doing so did not convince the dear old lady.

That afternoon Mrs. Klein was taking my wife to the seashore, to gather shells, of which there was a marvellous variety from "Portuguese men of war" to little shells the size of a mustard seed. Mrs. Klein asked me to join the party. When we got out of the car to go to the beach, she suddenly said to me, "Now I am going to test this divining of yours. Six months ago my married daughter was staying with me; we took her down to the beach, and on returning to the car on our way home, we noticed a gold brooch she had been wearing was missing. She then remembered that as she was carrying her small child from the beach, the child was playing with the brooch and must have unfastened it and so it had been dropped."

Mrs. Klein pointed to a piece of low scrub about a foot high and about sixty acres in extent, and said the brooch might have been lost in the scrub. I asked Mrs. Klein if she could remember where she crossed from the beach to the car; she had not the slightest idea of the track she had taken. I told the ladies to go down to the beach, and I would see what could be done.

When they had gone I quartered the ground, like a setter looking for game, and when I had reached the middle of the patch the rod began to pull down, then dipped suddenly. I then took my tracer, an L-shaped piece of No. 6 galvanised steel wire, and walked past the spot where I got the pull. The rod swung round, and gave the direction of what was working the rod. I then made a line about 6ft. long with little pieces of paper in the direction the tracer had turned. Then walking parallel to this line, the tracer swung round again. I then made a second line of paper at right angles to the first, and on searching carefully where the lines crossed, the brooch was found stuck in the scrub.

I put the brooch in my pocket, and went down to the beach to the ladies. Mrs. Klein said "I see you did not find the brooch." I asked her if it was of 9 carat gold, which was marked on it; she replied she did not know the quality of the gold. I then asked if it had three opals set in it, one of which was badly scratched; she cried out, "You have got the brooch." I handed it over and asked her if she now believed in divining. She most emphatically said "NO! it was just chance that you saw the brooch as you walked along."

It would have been just as easy to find a needle in a haystack as to find the brooch in that patch of scrub, without the rod. It is more than difficult to convince people against their will.

AN EXPERIMENTAL INVESTIGATION OF THE PHENOMENA OF RADIO-PERCEPTION BY MEANS OF PENDULUM OSCILLATIONS

By J. L. CAPES, B.Sc.

PART II

In Part I (*B.S.D. J.* 19, page 127) observations on the behaviour of pendulums of various frequencies in the presence of different substances and surface conditions were described in detail, particularly for directions in a horizontal plane. The occurrence of conditions in which the movements of the pendulum were erratic was only briefly mentioned, as further confirmation was required before making any definite statements as to the nature of the disturbing effects.

PERIODIC PAUSES IN ACTIVITY

Another observation requiring full confirmation was that of a complete cessation of the phenomena at intervals, and a large number of experiments with different frequencies had to be made before reaching the conclusion that there is a periodic pause in activity which occurs regularly nearly every 310secs., the duration of the pause being nearly 155secs. This fact is easily demonstrated by obtaining a continuous gyration in normal conditions and holding the pendulum steadily in the same position long enough to pass through two complete periods, *i.e.*, at least eleven minutes. If, then, observations happen to begin during an inactive period, any movement of the oscillator must be forced, consciously or unconsciously, and this can usually be decided immediately by clenching, which will be ineffective during the inactive period. For this reason, it is essential to leave the oscillator to itself and on no account to give it an initial swing. The active period during which stable normal reactions are observed usually lasts only for 75secs., and after this for another 75secs. there is a change in the phenomena often accompanied by instability, up to the return of the inactive period. It is therefore necessary to work with a centre-second watch in view, in order to get consistent results; and only little more than a minute is available for continuous observation at any time. I shall call the two parts of the active period the First and Second Phases and the effects during these two phases will be described later in the accounts of some actual tests.

PHENOMENA IN A NULL ZONE. OCULAR REACTIONS

A null zone was defined in Part I as a region where the oscillator is in a state of unstable equilibrium and therefore any small change in the conditions producing the null zone influences the

motion of the oscillator immediately. It was some time before I discovered that the apparently erratic movements of the oscillator in the null zone were controlled by the movement of the eyes, so that deliberate movement of the eyes will make the oscillator perform gyrations or plane vibrations or remain stationary as desired. But during stable normal reactions it is impossible to do this, or when the oscillator is forcibly swung during an inactive period. I call this effect the ocular reaction, as it is an essential part of the phenomena, which turns out to be a reliable method of determining whether the effects observed at any moment are stable or not. The effect had been previously noticed by the late Abbé Mermet, under the name of "Rayon Capital" or "head ray," who assumed that the thought of the operator induced the motion of the pendulum; and this might be possible if it were not for the fact I discovered that merely closing one eye or slightly obstructing the vision of one eye, or squinting, inevitably produced the same effect, which must be ascribed to visual conditions only. A further interesting fact is that an oscillator of frequency nearly 78 p.m. (equivalent length nearly 15cm.) is the sole exception to the rule that normal binocular vision is required for stability, as this frequency is *always* unstable in any circumstances, and a pendulum adjusted to it should be kept for demonstration specially of ocular reaction. It must be noted that the ocular reaction is just as strong for the ordinary pendulum as for the rubber oscillator, and if the bob were made of some transparent substance or had a polished surface, the null zones liable to be produced in such conditions would bring the ocular reaction into play and the movements of the pendulum would probably be quite erratic, "following" the unconscious movements of the eyes.

SAMPLES

According to published descriptions of the method of using a pendulum to obtain reactions near an object, the proximity of a small piece of the same substance is considered to be efficacious in distinguishing it from other substances. I tried the use of samples very carefully during my earlier experiments, and found that the results were quite haphazard and, in fact, that simple guessing would be equally effective. As there have been descriptions in this Journal of indoor tests to distinguish different solids enclosed in envelopes, or the identification of a salt solution in a jar among similar jars containing pure water, I will describe similar tests to explain why I have discarded the use of samples and substituted another method. Small pieces of copper, zinc and iron, for each of which a particular frequency had been found to react, were enclosed in cardboard boxes by another person and identification was attempted both with and without samples with equally inconsistent results. I noticed, however, that the order in which the boxes were handled, before

the tests, affected the results and that if any particular box was touched at my request any of the three different frequencies would react to it. Touching the same box myself soon afterwards changed the motion of the oscillator, and a second touch restored the original motion. Similar effects were produced by touching the oscillator with the hand or on the surface of the table. I then found that if I touched all the boxes immediately before the test better results were obtained. Similar effects were obtained with glasses filled respectively with water, salt solution and sugar solution, *i.e.*, the results were controlled by touching.

I therefore decided to find a frequency reacting to a substance while actually being touched, and by this means I obtained a frequency which, although perhaps only slightly different from the first observed, was independent of any subsequent contact or of the proximity of the free hand. The frequencies so obtained are the basis of the table of specific frequencies.

It was explained in Part I how the proximity of two or more similar substances was liable to produce null zones by interference, so that the presence of a sample would be liable to cause instability, and that such is the case is easily demonstrated by resting the sample on the hand holding the pendulum, when ocular reaction usually appears. If the sample is held in the free hand on the inactive side of the median plane, it is in any case ineffective, so that if two similar objects are one on each side of the median plane, they have not the slightest influence on each other as regards the reactions.

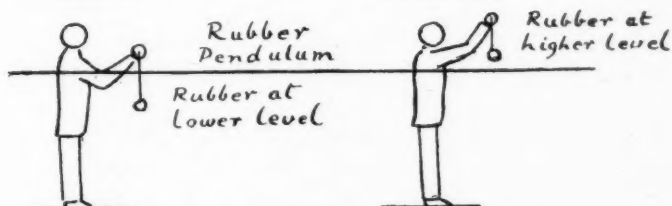
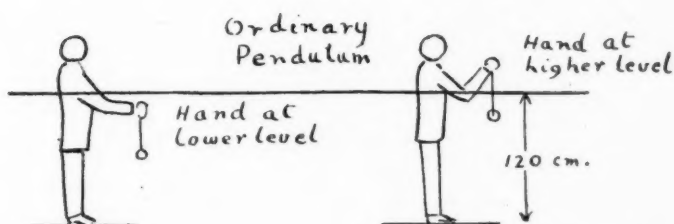
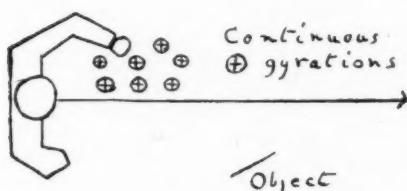
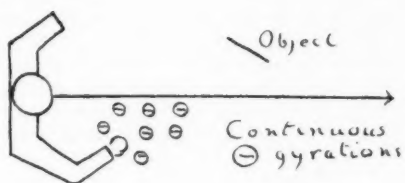
SERIAL NUMBERS

The principle of serial numbers appears in the change of motion of the pendulum when the bob is touched, as described in the "samples" test, and assumes that for a particular substance, after a certain number of contacts of the bob with the hand, gyration ceases, but for another substance a different number of contacts is required, the number of contacts being the "serial number" for the substance. As gyrations must in any case cease during the inactive period, and as the contact effect depends on instability and does *not* occur for stable reactions with the correct frequency, I can state definitely that the principle cannot be expected to give consistent results.

EFFECTS IN A VERTICAL DIRECTION

In Part I brief reference was made to the reactions of a pendulum moved in a vertical direction above an object, which were stated to be similar to those in a horizontal direction, *i.e.*, a series of + and - gyrations with neutral points. So far, I was not certain about the duration of the active and inactive periods, but since then I have been able to study the phenomena starting

PLAN SHOWING HIGHER LEVEL REACTIONS
(to compare with plans in Part I)



Positions of ordinary and rubber
pendulums for higher and lower
level reactions.

from the floor or ground up to a height of about 2m. Beginning with the basic reactions in unobstructed space, *i.e.*, continuous gyrations, at the level in which the horizontal reactions were observed (about 1m. from the floor) and moving downwards it was found that during an active period the continuous gyrations persisted to about 30cm. from the floor, but below that level became very weak. Moving upwards it was found that the continuous gyrations ceased at about 120cm. from the floor and that there was, in fact, a neutral zone above 120cm. up to the height tested (2m.) during the active period below the 120cm. level. The continuous gyrations due to the luminous and body fields are therefore confined to a layer of free space between 30 and 120 cm. from the floor, and I shall call the effects observed in this layer "lower-level" reactions.

The original optical bench tests described in Part I were then repeated at a level above 120cm., concurrently with a lower-level test on the same or similar objects. It was found that the cessation of the lower-level active period coincided with the beginning of an active period at the higher level, but that instead of the normal reactions there was only continuous gyration at all points, using the specific frequency, and no effect at all for other frequencies, the clenching effect, as usual, giving the direction plane of the object. Also the object must be on the *opposite* side of the median plane, but need not itself be at a higher level, *i.e.*, the reactions depend on the level of the oscillator (or of the hand with an ordinary pendulum) and not on the level of the object. Using two similar objects, the reactions are identical with the normal reactions for a single object, while the formation of null zones and the production of instability are exactly similar. These higher-level effects, though at first sight adding to the complication of the tests, are really of great assistance to them, as the time wasted waiting through an inactive period at one level can be usefully employed at another level for check observations, and particularly as the absence of some of the luminous effects at the higher level diminishes interference and instability, and thereby increases sensitivity.

EFFECTS DUE TO MECHANICAL DISTURBANCE OF SUBSTANCES

After repeated tests on the two conditions of inactivity, *i.e.*, the inactive zone on one side of the body and the periodic inactive period, it became evident that there was a third condition determined by the state of the test objects themselves. By accident, several test objects were left undisturbed for some hours and then re-tested, when it was found that all the objects were completely "dead," though the luminous reactions were as usual. This effect was traced to the fact that the objects had remained undisturbed mechanically, *i.e.*, not handled or shaken, for a

certain period, as immediately they were shaken or knocked (not merely touched gently) the normal reactions reappeared.

However, it was found that a "dead" object *could* react by a simple change in manipulation, merely that of shifting the pendulum (in the same hand) to the other side of the median plane. This "repose" effect occurs equally at the higher and lower levels, and although it is unlikely to occur in indoor tests with small objects frequently handled, its existence must be remembered in relation to inaccessible objects. Some previous writers have suggested the possibility of buried objects becoming inactive after a time, and investigations in this direction are in progress.

DIMENSIONAL EFFECTS OF LARGE SURFACES

A short account was given in Part I of experiments on elongated objects in different positions, but no reference was made to the effects of large flat surfaces, as of walls and tables. Test objects must necessarily be supported on tables, but it was some time before I realised that the actual dimensions of the table were most important in getting consistent results. It was only by chance that my earlier tests were conducted in proper conditions, *i.e.*, on a bench only 20cm. wide in the direction of the incident light, and when I repeated the tests on a large drawing-board at the same level the results were most conflicting except at the edges of the board. Briefly, the surface supporting a test object should not be wider than 15cm. in any direction and must be raised at least 25cm. above the surface of an ordinary table, and preferably be placed close to the edge. In any actual test the space which will be occupied by each test must be previously explored to make sure that there is no abnormal reacting in it, *e.g.*, in several cases "images" (in the optical sense) producing normal reactions like a material body were observed and traced to beams reflected from mirrors and pictures, but invisible from the ordinary eye-level.

With regard to walls, their effect can usually be neglected a short distance away (say 30cm.) except when using frequencies associated with their materials.

GENERAL TESTS WITH VARIOUS SPECIFIC FREQUENCIES

The conditions required to obtain consistent results having been summarised above, it remains to see how their application can provide a practical method for detecting objects in their natural surroundings, without excessive complication in observation or deduction. As the particular interest in these experiments is in connection with the detection of underground water and metals, which are necessarily in contact with a variety of other substances, it is essential to be acquainted with the reactions

to be expected from two or more elements in contact before attempting to search for the possible presence of any one element, and, obviously, the reactions for an isolated single element must first be clearly understood.

TESTS ON A SINGLE ELEMENT

I have found iron to be a convenient substance for this purpose, as it is a common object in small and large quantities, both in the house and out-of-doors. The first test object is a cylindrical tin-plate box, of diameter 7cm. and height 8cm., with a close-fitting lid, standing on a light wooden pedestal on the edge of an unvarnished table at about 90cm. from the floor.

Test I.—Range.

The breadth of the zone of influence in any direction will be called the "range" in that direction. In this case the range in any horizontal direction round the cylinder was about 130cm., using a rubber oscillator, and about a third of this for an ordinary pendulum, the specific frequency for iron being 52. Various iron weights were put in the box, but the range in each case appeared to be unchanged. The mass of the empty box was about 50gm., and when the mass added was more than about 100gm. a null zone appeared round the box, whose width increased with the mass. Separate $\frac{1}{2}$ lb. and 1lb. weights and large masses such as typewriters, stoves and baths were then tested and found to be surrounded by null zones in which stable observations were not possible. This peculiar effect, which occurs similarly with other metals, appears to limit the normal reactions to small masses of the substance.

Test II.—Two elements in proximity.

Small pieces of sheet copper were put in the iron box, and it was found that normal reactions for the iron frequency lasted for 75secs. during the active period, followed by an unstable period of 75secs. The same pieces of copper were then placed outside the box, close to it, with a similar result. This was repeated with other metals, viz., zinc, tin and aluminium, with exactly the same result, whence the important principle may be stated that the mutual influence of two metals is the same whether they are only in proximity or if one completely encloses the other.

If a second pendulum is used of the specific frequency for the added metal, it will show normal reactions and instability during the same periods as for the iron.

Small glasses of water, alcohol and paraffin oil were then tested in turn both inside and outside the same iron box, using the specific frequency common to liquids, with similar results to those with the metals. Outside the box, the possibility of instability due to luminous reflection and refraction in the liquid and glass must be allowed for.

The existence of instability from three separate causes, viz., luminous surface effects, large mass and mutual influence of different substances make the tests require so much care on the part of the observer that they can scarcely be considered practical, and in the hope of simplifying the technique and reducing causes of instability fresh tests were made on a different plan, *i.e.*, instead of trying to find the specific frequency for a particular substance, to take any length of pendulum by chance and observe its reactions in different positions to *all* objects in its neighbourhood. It was found in this way that the influence of very light substances on the reactions was much more important than had been supposed, and that, in fact, no object within a radius of several metres from a pendulum must be neglected for its possible influence on the reactions.

REACTIONS TO PAPER AND CARD

The effect of a sheet of white paper in causing reactions for pendulums of any length has been described in Part I. Neutral tinted sheets were without effect, but if they form the surfaces of closed bags or boxes, the same multi-frequency effect appears as for the white sheet, with the result that it is not possible to observe the normal reactions for metals enclosed in paper envelopes or cardboard boxes, as the space round them is a null zone and the reactions unstable. This difficulty was not got over until it was discovered by chance that a closed empty cardboard box (cigarette box) which had been left on a table in the middle of a room nearly empty of furniture completely destroyed all pendulum action in the room and in adjoining rooms with the doors closed, at any time of the day or night. The effect was evidently due to the isolated position of the box, as if it was moved close to a wall or put inside a cupboard the effect ceased, as also if the box was opened a little or another similar closed box placed close to it. As oscillations which cease rapidly are said to be "damped," the effect of the closed box will be called its damping action. It then occurred to me that if a small, hollow box exerted such a wide-spread damping action, an object of the same material of skeleton or open, cellular structure, might have the opposite effect of reducing the damping, *i.e.*, of accelerating or amplifying the oscillations. Accordingly an open, rectangular framework of the same card was constructed and placed near an envelope containing a piece of metal, when it was found that the reactions of the metal could, in fact, be observed, showing that the null zone had been modified and the instability decreased.

It was then remembered that the required skeleton structure exists naturally in vegetation, and a small dessicated bush about 30cm. high was found to be similarly effective in reducing damping, and over a greater radius than the cardboard structure.

ARTIFICIAL METHOD OF STABILISING OSCILLATIONS

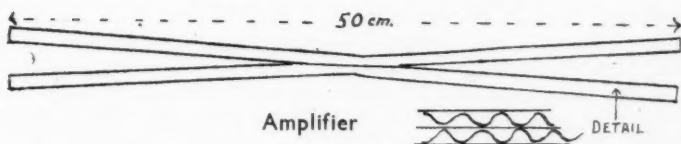
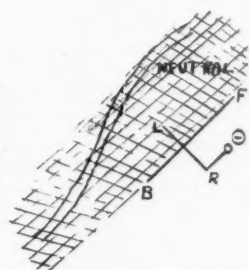
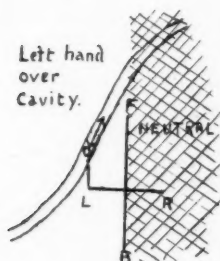
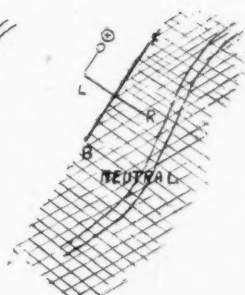
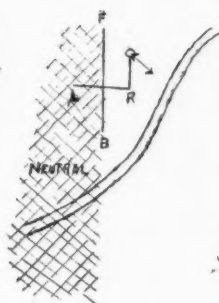
The nearest artificial approach to the structure of vegetation is that of a brush which consists of conical cells (the peculiar effect of a V shape has been noted in Part I), and as it turned out that any brush had a powerful action, either in reducing or increasing damping in its neighbourhood according to its position, a systematic trial was made of brushes of different sizes and shapes and in various positions near a simple test object—a small iron box, with and without a wooden case—throughout the active and inactive periods and at the higher and lower levels of observation.

The results show that small, stiff brushes, such as nail-brushes, are just as effective as large brushes, and that a pair fixed together with the bristles interlocking (not back-to-back) are much more effective than a single brush, and if one of these pairs is placed in a pocket on each side of the body, stable reactions are obtained over nearly the whole range of frequencies, at both high and low levels. This stability is evidently due to the neutralisation of the purely luminous effects, including white and black and coloured surfaces, except for very strong illumination. The neutral zone on the opposite side of the median plane is unchanged, but the neutral period practically disappears, which is most important for practical purposes, as nearly continuous observations of reactions are now possible. The neutral level at 120cm. remains, but above and below it reactions are the same. The necessity of clenching disappears.

MUTUAL INFLUENCE DUE TO DIFFERENCE OF DENSITY

During the same tests it was found that, in general, the proximity of a substance of low density to one of high density facilitated the appearance of reactions, *i.e.*, reduced the damping. Thus the null zone observed round heavy weights disappears if a small scrap of paper is laid near the weight, cloth and wood being also effective. It had been previously noticed that the reactions to a gold watch were apparently weaker than to a minute quantity of the metal in quartz, and, similarly, a 2kg. lead weight showed weaker reactions than a lead salt (acetate). The use of quartz for detecting gold has been mentioned in previous publications, the quartz being called a "sample," to be held in the hand or used as a pendulum, while in this case the quartz accompanies the gold and not the observer. Colours have also been called "samples" for metals, but from the above tests, it is very probably the material holding the colour (usually cloth or paper) which assists the reactions. In any case, when the stabilising brushes are used, colour effects disappear, but the material effects persist. The effect of the removal of the luminous reactions is to amplify those remaining, as is seen by

REACTIONS WITH STABILISED OSCILLATIONS



a general increase in range which is fully doubled when the stabilisers are used.

CONSTRUCTION OF AN AMPLIFYING DEVICE

Further tests led to the discovery of an effective method of amplifying all reactions, *i.e.*, with no change in the nature of the reactions but only an increase in their strength. It is to be noted that the brush effect is not the same, as it changes the nature of the reactions. The principle of this device depends on the action of another variety of artificial cellular structure, in the form of the very light corrugated packing board now in common use, consisting of a sheet of thin corrugated paper between two thin sheets of paper. The stouter board with the corrugated sheet attached to only one sheet is not so effective. Pieces of this board of various shapes and sizes were tested like the brushes, and it turned out that strips of a double layer of this board, about 50cm. long and 3cm. wide, cut with the ridges of the corrugations across the width and attached by the middle to a similar strip, leaving the ends free, constituted a most powerful amplifier when held by the middle in the free hand. It acts equally well no matter how it is held or moved about during observations, as long as the ends of the strips remain a little open. It actually forms two V rods, fixed point to point; a single V of the same material is useless and a double V made of solid wood was very weak, so that the peculiar effect is largely due to the double corrugated board.

Instability is equally amplified by this rod, but is also corrected by the stabilising brushes, and a combination of these accessories, which are not at all inconvenient to use, is so sensitive that probably any element existing in a flat of several rooms will cause reactions with a pendulum of the right frequency held anywhere in the flat.

PROCEDURE REQUIRED FOR DETECTION BY MEANS OF STABILISED OSCILLATIONS

I.—Basic reactions.

Any pendulum which is out of range of an object associated with its particular frequency will usually gyrate continuously (the basic reaction) at any point on the active side of the body, *i.e.*, on the same side of the median plane as the hand holding the pendulum, while on the opposite or inactive side of the median plane the pendulum is stationary. "Out of range" means either that the object is too far away on the active side or that it is anywhere on the inactive side. If there is no motion anywhere on the active side, there must be some local source of interference.

II.—Normal reactions for one object.

When the object is in range, *i.e.*, near enough on the active side, the pendulum usually vibrates in a plane passing through

the object if relatively small, and through a certain point if the object is relatively large and of irregular shape. If the object is traversed by the median plane, only the portion on the active side reacts.

III.—*Reactions for two or more similar objects.*

When two similar objects are in range, the reactions depend on their relative positions. For certain distances apart null zones appear, causing instability, *i.e.*, the motion will follow the eyes, and at other distances, stable reactions occur with vibrations first in the plane of one object, changing rapidly after a certain time into the plane of the other object.

IV.—*Direction finding.*

By turning the body round, or changing the pendulum hand, so that the object lies in different directions on the active side, its position can be determined from cross-bearings by the intersection of the different planes of vibration. Direction finding by pointing the free arm and hand is useless in these tests, and, in fact, any change in the motion of the pendulum caused by a movement of the arm would imply instability or incorrect adjustment of the frequency. If the pendulum is directly over the object (which may be underground) and is moved vertically upwards or downwards, it will perform a series of + and - gyrations separated by neutral points as described in Part I, except when the object is much elongated as for a tunnel or stream. Immediately over the tunnel the pendulum will oscillate in a plane parallel to the direction of the tunnel, while on either side, the plane of the vibrations will be directed towards the nearest point of the boundary of the zone of influence of the tunnel, where the meaning of "zone of influence" is that used in *The Modern Dowser* (the diagram on p. 56 shows the zones for a stream).

These remarks may be summarised very briefly as follows:—

If the object sought for is anywhere in range on the active side, the pendulum will oscillate in its direction; if not, the pendulum will gyrate.

It is essential that the stabilising brushes are used, as without them the luminous effects and the unstable periods appear.

DETERMINATION OF SPECIFIC FREQUENCY

Knowing the reactions to expect, the rest depends entirely on the purely mechanical operation of adjusting the length of the pendulum correctly. To find the correct frequency, say, for water (the reaction common to all liquids), a small glass of water is tested at a short distance (50cm.) in a dull light with a pendulum of length nearly 31cm. and the length adjusted so that touching the glass or the water with the free hand or with a stick held in the hand, the motion of the pendulum is not changed. The glass of water is then screened by different

materials, such as metals, brick, stone, paper and wood, and using the stabilising brushes, so as to remove luminous interference, and, making small further adjustments to the length when touching the screen, if necessary, the length finally obtained should react to water in any surroundings. Out-of-doors, reacting to the presence of known water at a distance, a minute adjustment of the length may again be required, touching the ground on the active side at the same time. Squash racket balls make convenient oscillators for out-of-door work, as, being hollow, they are not too heavy, but heavy enough for use in a moderate wind. In any case, a wood screen held by another person can be used in strong winds without affecting the reactions.

This liquid reaction is the same for both stationary and moving liquids, but there is another frequency which appears to react only to running water and is extremely sensitive, corresponding to a length of about 35cm. and the two pendulums should be used in searching for water.

Cavity reactions, which appear to be the easiest to observe of any, occur for several frequencies, of which the most convenient and sensitive is that of nearly 41 p.m. or a length of nearly 52cm.

The diagrams illustrate the method of tracing the course of an underground cavity or stream.

REVISED TABLE OF SPECIFIC FREQUENCIES

Element	Approx. Frequency per min.	Period in secs.	Approx. Length in cm.
Carbon	53	1.16	33
Sodium	74	0.81	16.5
Aluminium	73	0.82	17
Sulphur	81	0.75	14
Calcium	54	1.12	30.5
Silicon	54	1.11	30.2
Chlorine	68	0.88	20
Tin	57	1.05	28
Zinc	56	1.07	29
Iron	52	1.15	32
Copper	44	1.34	45
Lead	48	1.42	47
Silver	49	1.22	38
Gold	42	1.43	48
Water (liquids)	53	1.13	31
Running Water	50	1.20	35
Cavities	41	1.46	52

N.B.—The lengths of pendulum are only approximate and intended as a starting point to obtain the correct length experimentally.

SOME NOTES ON "POINT DEPTHING"

By H. O. BUSBY

A curious fact has been noted while experimenting with the point depth method, and it is that it is possible to *project* the radiations given off by streams, &c. I have been using a "point," consisting of a brass or copper pipe with an iron point; to the top of this pipe a straight, hard-drawn copper bar of about 12 gauge 2 feet long is clipped by the centre (see *B.S.D.J.* 19, p. 116). I have not seen or used a mumetal rod as advertised in the *B.S.D. Journal*, and I do not know if such a rod is obtainable in Australia. I have had good results with this point. However, I made an alteration in the shape of the bar, bending it into a curve. I then found that the depth lines (seven for water) were more clearly and strongly marked when walking out from the concave side of the bar, and that there was practically no reaction on the convex side. I then marked out the "radiation" fields of the two types of radiator, and found that the straight bar gave a fairly diffused field on each side of the point, while the curved radiator concentrated the radiation, analogous to "beam wireless." I then prepared a third radiator with two curved wires crossed at the centre, and found that it acted as a reflector. I placed the point on a radiating zone and directed the "beam" on to a wall about 50 yards away. I then found that I could trace a radiating circle on the wall about 4ft.-5ft. across by using a length of wire as a pick-up. This is an experiment which any of your readers may try for themselves. This experiment also seems to show the nature of the indications reacted to by dowsers in a demonstrable form, and helps to remove dowsing further from the realm of hypothesis.

That this radiation is extremely penetrating is shown by the fact that I have picked up the "beam" projected by the third type of radiator described, after it has passed through four brick walls. Of course this penetration has been shown, by Mr. Budgett for instance, in a vertical direction, but I have not seen any reference to the horizontal projection of the radiation.

WATER DIVINING

By R. E. St. LEGER-GORDON

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The remarkable progress of scientific research during the past half-century has been responsible for the elucidation of what may be termed in many cases "natural mysteries." The Jack-a-lantern is no longer a malevolent lure to destruction, but a chemical product of marsh effluvium. Thunder, once attributed to the

wrath of the gods, is now merely a surcharge of electricity in the atmosphere. Probably, in the near future, even "ghosts" will be found to have their origin in something akin to television. Nevertheless, though the bubbles of superstition are being burst one by one, a few problems still remain to baffle the scientist. In the world of sport "scent" presents one of these enigmas, and the so-called art of water divining another.

The practice of rhabdomaney, or divination by means of a rod, is of very ancient origin, and was exceedingly comprehensive in its professed scope, embracing during the Middle Ages such a variety of objectives as "minerals, water, heretics and faithless wives." Such extravagant claims gradually led the whole art into disrepute among more enlightened people, and in view of the fact that water divining has experienced an undoubted revival, being practised with success in many country districts to-day, it is interesting to read extracts such as the following, written during the last century:

1847. "*Divining Rod*. A forked branch, usually of hazel, by which it has been pretended that minerals and water may be discovered in the earth. . . . The mode of using the divining rod of the modern miners and water-finders, seems to be a superstition of comparatively recent introduction. Many persons with some pretensions to science have been believers in the powers ascribed to the divining rod."

1888. ". . . . This branch of the black arts (rhabdomaney) exists to-day in China and other Eastern countries; it was known to the Romans and is said by some even yet to live on, though it is fast expiring, in England. . . . It has recently been asserted that the rod is still slyly employed in Cornwall."

Actually, the divining rod was used by Cornish miners in the search for tin and copper veins until quite recently, but its present-day use is confined almost entirely to water-divination, of which more takes place in remote country districts than is, perhaps, realised.

A series of droughts during the past three years, and the extraordinary increase in the building of small houses and bungalows, has rendered new or supplementary water supplies a vital necessity in many places. Although the number diminishes annually, there are still hundreds of English villages and hamlets lacking the amenities of main water and drainage. Such communities are dependent either upon a public communal well or tap from which all water must be carried, or each dwelling is supplied from its own spring. It is in rural areas of this character that the water diviner plies his trade, being looked upon, not with any superstitious veneration or awe, but merely as a craftsman, sent for in a professional capacity after the manner of carpenter or mason. From the same prosaic standpoint, that is, merely as a means of livelihood or a money-making asset, the "dowser" regards his own peculiar gift. That the faculty is a gift, existing

in certain individuals as does a talent for music, aptitude for drama or ventriloquial ability in others, seems indisputable to anyone who has been brought into frequent personal contact with this practice and its exponents.

Typical of the art in its present-day aspect is the professional water diviner of this particular west-country district. He carries his craft to the utmost extent, for not only does he "divine" the hidden spring in the first instance, but with the assistance of his son—in whom, by the way, the father's special ability has not been reproduced—he sinks and bricks the well, lays the necessary pipes, and only considers his contract completed when the freshly tapped water supply is flowing in the desired channel.

Beyond a little natural pride in his somewhat peculiar vocation, there is nothing in the least unusual about this simple villager, who speaks the broad vernacular and toils at his well-digging like any ordinary labourer. He is well known throughout the county, being requisitioned to exercise his skill by local councils in need of supplementary water or new supplies for council houses and reservoirs, farmers whose field springs have dried up, and residents building new bungalows. In one place his efforts have resulted in the development of a flourishing tomato-growing industry, and in another, a swimming pool, to mention but two examples.

This power of water-divination is sometimes vaguely ascribed to "electricity in the body," and it is usually assumed to be negated by the wearing of rubber. The man described, being accustomed to country lanes and sodden fields, seldom appears in anything but gum-boots, which have no counteracting effect whatever upon his ability. The conventional Y-shaped "rod" is used, but in this case is fashioned of twisted copper wire, the reaction upon hazel in his hands being so strong that the wood simply twists and crumples, necessitating the cutting of a fresh twig each time. I have personally witnessed the plainly visible jerk, in appearance akin to an electric shock, which not only splintered the wood but tore the skin from his fingers.

Many people are, of course, completely sceptical about such performances, regarding the rod in a similar light to the conjuror's hat or the witch-doctor's rattle, namely as a blind, used merely to impress. It is argued that the diviner possesses an intimate knowledge of the countryside and may therefore be supposed to have acquired a general ideal as to the whereabouts of springs and water-courses, whether visible or otherwise. Taking the man in question as typical, the contention is difficult to substantiate. He has received no education beyond that of the village school—considerably less efficient fifty years ago than now. Far from being assisted by any topographical knowledge, it is immaterial to him whether the district in which he is called to officiate is familiar or entirely unknown. Such words as "geology" and "strata" convey nothing to him, and he is

unable to classify any rock or stone brought to light in the course of his excavations. With the pride of justification when the shaft is nearing water, he will indicate what he calls "water-course stones"—rocks whose erosion testifies to the proximity of the objective. Beyond that his knowledge does not extend, and to the uninitiated, the man's faith in his own ability provides one of the strongest proofs of its authenticity.

The process cannot be better illustrated, perhaps, than by a brief description of it as carried out upon our own ground.

During the recent drought it was found necessary to sink a new well. Application was first made to a firm dealing in all domestic and agricultural requirements, by whom we were referred to the local water-diviner, well known throughout the county and residing in our own village.

He arrived on a wet morning, in rubber boots, an old sack round his shoulders, and with the copper-wire rod in a paper parcel. Grasping the latter with the stem upturned, he embarked upon a comprehensive tour of the premises, indoors and out. Hidden water was registered by the sudden depression of the implement inside the house in two of the rooms, out through the back yard, across a corner of the garden and an adjoining field in a diagonal line. This line was tested several times with corresponding results, and other places being tried ineffectually, according to the diviner there was but one channel upon which to draw.

He indicated a certain spot "where the pull was strongest" as the best site and marked it with a stone. There was nothing to suggest water beneath this particular patch of turf rather than another, the entire piece of ground being of an arid description bearing nothing in the way of rushes or marshy vegetation. The whole machinery with its attendant expense was, therefore, to be set in motion merely upon the assertion of this one small man. Undoubtedly, his quiet certitude was largely instrumental in settling the matter, and twenty minutes later he was back, accompanied by his son, with pick and shovel. With the point of the latter and purely by eye, a perfect circle was traced in the grass and the work began.

One of the most convincing circumstances to an onlooker was the assurance with which these two men continued stolidly hacking and digging through foot after foot of dry rock and soil, confident of ultimate success. The fact that this particular water diviner is quite unable to state at what approximate depth water will be reached may be cited as further proof that no scientific knowledge of any sort influences his predictions. He can estimate by the force of the rod's reaction whether a spring is likely to prove strong or weak, but can make no further pronouncement upon the subject. In the instance quoted, water flowed in freely at nineteen feet, but some of his "pits" have been sunk to a depth of fifty or sixty, necessitating blasting—an

operation also performed by the diviner himself. In every case, however, success has rewarded his perseverance, and during many years of professional dowsing, not a single failure has marred his record—surely a remarkable achievement, even if inexplicable and therefore scientifically unrecognised.

An interesting point that may possibly assist explanation at some future date is that the water must be *concealed* to permit registration by the rod. Passed over an *open* stream, trough or pool, no reaction whatsoever takes place, and it seems evident, therefore, that some peculiarly sensitive bodily trait acting in conjunction with an unknown quantity in the earth itself, establishes the necessary contact.

Regarded thus as a purely physical ability, it seems unreasonable to deny its existence in certain individuals. The mistake has lain in attributing "magical" powers to a proceeding that probably lends itself to some perfectly simple elucidation. The age of superstition, when fantastic claims were made by charlatans and rogues, when wands were cut with ceremonial and incantations at certain times of moonrise or sunset, and the whole affair wrapped in mystery, was largely responsible for condemning what appears, after all, to be merely a natural process of some description.

Bearing this in mind, its gradual emergence once more into the respectability of a more or less recognised profession is an interesting development, and it only remains for science to discover the cause of this as yet unaccountable, but none the less apparently genuine gift of water-divination.

THE RADIAL DETECTOR

By A. A. COOK

In the following article I give some of my personal experiences and experiments with the Divining Rod, which, because of the results obtained, I prefer to call the Radial Detector. There may be those differently constituted to myself, who do not get the same results, but I am dealing with my personal experiences only. Diviners trying for the same results must be free from diversity of objects carried, such as watches, gold, silver and copper coins, penknives, cigarette cases, metal sleeve links, &c. They should also be clothed, as nearly as possible, in light, sober-coloured garments. Wrapping objects in rubber definitely retards, and will eliminate, if well wrapped, the issue of radiations, and would be the cause of a number of diviners not getting the same result, assisted by the fact already mentioned of the influence of objects carried.

There are many things which influence detectors working, and demonstrations often fail because the operator has not the knowledge to find out and correct the adverse influence. My experiments lead me to the conclusion that the motive power of the detector's movement comes from the sun and is physical and not psychic. Whether these rays or radiations are magnetic, electrical or produced by some agent of which we at present have little—as with the Cosmic Ray—or no knowledge, I do not know, but I am inclined to think the last surmise goes near the mark. Reading that all matter is made up of cells, and these cells are composed of radio-active atoms, molecules, &c., strengthens the belief that the movements are caused by something physical.

Concentrating is no help to me, as it does not bring any result, nor—which is equally important and logical—change a result gained. I use the detector with an open mind, and think of anything free of the subject, only taking notice when the detector works. I have tried angle and other types of rods or detectors. The angle detector to me was uncertain, as the movement of wrist and hand, as well as the action of the wind, when working in the open, had too much influence over it. The detector I use I make out of bamboo. This wood enables the shafts to be whittled down to make a very delicate detector, enabling one to hold the handles, also made of bamboo, but not whittled down, quite firmly. The light shafts when meeting any radial influence bend, but return to their original position when the influence is passed. This rough sketch will give some idea



of the detector which is about 20in. to 22in. in length over all.

I am unable to use metal detectors, as they in themselves become "samples" and cut me off all other radiations. If when using the detector a number of people crowd round me, it ceases to work. If persons are on the sun side of me I must get at least 45 feet away from them, and should I be on the sun side of them, 10 feet away for correct work.

I live on a volcanic hill top, 200 feet above sea level, with mineral lodes running through and about the hill. On cloudy electrical or stormy days I cannot get the detector to work, but on going down to the flats, which are free of these lodes, the detector works as usual. I have tested diviners who use metal detectors and say that nothing they carry interferes with their work. If the ground worked over is alluvial and free from mineral lodes, their work (for water) is mainly correct, but in the other event they make bad mistakes. Those who have gold or other filling in their teeth, are uncertain on metals,

other than the metal in the filling, nor can they pick up radiations from animals, trees, &c., with the necessary accuracy.

All animals, from the largest to the smallest (including man), are giving off radiations, as are all trees, plants, grass, rocks, &c. I make this statement because I can pick up these radiations. We were told some time ago of the effect of radio waves on carrier pigeons. They had started out in the right direction for home, which was past the towers of a radio station. They were confused and lost all sense of direction when the station sent into the air certain radiations of a definite wave length. When the current was turned off the pigeons eventually settled down and started again in the right direction for home.

Some of the experiments which go to support the physical view are: First, that one gets different results with different coloured detectors—influence of the sun on colours; second, when working with one's back to the sun, and when working with one's face to the sun, the results are not the same; third, we have electrical instruments to test for water and for mineral lodes, and where these instruments indicate the presence of one or the other, so will the detector indicate at the same spots. These experiments can be carried out independently and at different times, so that the operator of the detector can have no knowledge of where the electrical appliance worked or did not work.

In reference to colours I find it impossible, no matter how I concentrate, to find water with a red detector, or with an ordinary uncoloured detector should I wear a red coat. The only thing I have so far got the red detector to work on is iron or an iron lode.

With one's back to the sun one can test for similarity, but facing the sun, the test is for definition. Taking the following substances, a few of many, which have an atomic similarity, due to some harmonious relation between their respective atomic systems. We will call them Group 1, Group 2 and Group 3. Any one of a group will work on all the others of its group if one works with one's back to the sun. No 1 Group—Sodium, Copper, Silver and Gold. No. 2 Group—Carbon, Silicon, Germanium, Tin and Lead. No. 3 Group—Zinc, Cadmium and Mercury. With one's face to the sun no result is obtained, working over these, unless one uses Sodium to Sodium, Copper to Copper, and so on.

As an example of different influences on the same spot. Work on a stream of water, running north and south, in the morning. The detector will work when crossing the stream from east to west and from west to east. A small bottle of water, from some other source, closed with a cork, is put in the operator's hand (or pocket) and the detector will work when crossing the stream from east to west (similarity), but will not work from west to east (definition). A bottle of water from the stream

being tested would work both ways. Discard the bottle of water and replace with a small corked (or uncorked) bottle of salt, and the detector will not work going east or west. It would only do so if the stream was a salt or brackish one. In working any liquid, one can get the radiations with a corked bottle, but no reaction will be obtained if the bottle is closed with a glass stopper.

Facing the sun one can get radiations from a human being at a distance of about 40 feet, but with one's back to the sun at only about seven feet. These distances vary a little with different people, and also when they are well or ill, with the same subject. If one carries something that an individual has had in his possession, that individual can be followed on the route he has taken and also his position determined when he is miles away, when one faces the sun. For a quick demonstration an individual can be followed if the detector is allowed to rest on his body for a few seconds, but this influence wears off the detector before long.

I can only find one point of the compass and that is the north. To do this I walk round the trunk of a tree, for preference, and the detector will work on the east, south or west but not on the north. I would like to know if the same rule applies in the Northern Hemisphere.

In conclusion, the two following experiments, two of many, may be of interest :—

1.—Fill two (or more if desired) glasses with different beverages, and when the operator is not in the room, let someone drink from one of the glasses. He is then to come out of the room to the operator, who is outside, and the latter is to say which beverage he drank.

2.—Get someone to put two cups of water, in one of which he has mixed an amount of salt, under a cloth. While they are under the cloth the operator is to point out which of the two contains the salt, and also say what amount has been used in the solution.

I do not think these experiments can be done by those who, as previously stated, have filled teeth or carry metal, oil, &c., or work with metal detectors.

THE PENDUL-RADIOSCOPE

By Dr. W. T. BIDWELL

Truth is stranger than fiction! I shall stick to facts. The path with the Pendul-Radioscope (as named by the late Dr. Adolph Selige, of Miami—Fla. in America) is truly of more wonderful unfoldment in mental realms than the tales of Arabian Nights in visionary dreams.

What is related is from actual experiences, and is not based upon the theoretical, hypothetical or the speculative, nor upon a stated premise or postulation or supposition, but things and conditions that have actually happened.

After five years of study with the Pendul-Radioscope under the tutelage of Dr. Selige, who so generously and unselfishly shared all his findings with me, as his student and later his collaborator—but always as his student—it became my good fortune to become acquainted, through the mail, and through the friendship of Dr. Selige, with Dr. Emma E. Martin, M.D., of Otterbein, Ind.

Dr. Martin has spent 22 years in China, as a medical missionary, and returned home invalided on account of intestinal infection. Arriving home and getting no result from old school practitioners and hospitals, she turned to electronics and aetheronics, by which she restored herself to a continued life of usefulness.

In this section there is a knoll or hill that has for the past fifty years been known as the "rocks that shock," and the natives of that vicinity tell stories of wonderful healing by sitting on these rocks, and bathing in, and drinking the water that flows from beneath this knoll.

Some of this rock was sent to Dr. Selige, who in turn sent pieces to Dr. Martin, who declared it to emanate the vibratory rate "9081." The same vibratory rate as the sex hormone. The same vibratory rate as LIFE PRINCIPLE. Continuous correspondence followed. Dr. Martin went to a convention, and I sent her a supply of rock fragments to be distributed amongst her fellow aetheronists and electronists, and one doctor from Kansas wrote, "It is truly a remarkable rock." At this convention Dr. Martin told Dr. J. C. Burnett, of the Burnett-Timken Laboratory, Alpine, N.J., what I had written her about the knoll and the rock. The result of which Dr. Burnett, being a real seeker after truth, paid me a visit, and together we visited the knoll, where he procured such specimens as he desired. Upon returning to my office, in the course of an evening's discussion, I made a diagnosis of Dr. Burnett, holding his right hand in my left hand, while I operated the pendul with my right hand. At the conclusion of which he remarked, "Another means of determining the truth." This event marked a great epoch to the future users of the pendul in America (as shall be related later).

In August this year (1937) Dr. Martin wrote that she had an hour on the program at the American Association for Medico-Physical Research Convention, to be held in Chicago September 22nd, 23rd, 24th, and offered to share this time with Dr. Selige and myself, in order that we could present to the Convention assembled the usage of the pendul in diagnosis and treatment if we could arrange to be present.

When the time arrived Dr. Selige did not feel disposed to make

the trip. I arrived at the Convention, knowing not one of the members of the Association, save Dr. Martin, who had become known to me through correspondence.

Sponsored by Dr. Martin, the Membership Committee passed on my application and I was introduced to the Convention members. During the second day of the Convention Miss Neara McRoberts, daughter of the late Dr. J. W. McRoberts, the founder of aetheronics, asked if I would make a diagnostic demonstration that night in her hotel room, in the presence of friends. The answer was in the affirmative, although in our early days we had thought that we must be alone, away from the interference of other minds—while I had done diagnosis before individuals, never before a crowd; but here I had committed myself to do a diagnosis before the leaders of Aetheronic and Electronic thought in America.

Assembled that night for this demonstration were some 20-25 physicians, scientists, engineers, &c. The patient selected was a medical doctor, member of the association, whom all had known for years. During the diagnosis as the pendul struck its beat on the various organs of the body—as to health reaction, function and disease reaction—I related my finding and set the figures in my own symbology on the pad before me. As stomach was checked as to health and function, both were low; as to disease reaction the pendul struck 180 (our reading for malignancy). This was set down and passed on without explanation, as I considered it a delicate matter. When the reactions of the small intestines, colon, gall bladder, bile duct, pancreas, pancreatic duct, liver, kidneys, bladder, prostate, skin, circulatory fluids, different tissues of the body, &c., had been finished, Dr. Madge Stephens, of Terra Haute, Ind., who had been, with all the others, checking against my finding, said: "Doctor, did you find malignancy in the stomach?" To which I replied: "180 is our number for malignancy and note that this reaction number was set down." Her next question, "What disease reaction do you find in the heart muscle?" To which I replied, "Streptococci," which she affirmed. The diagnosis came to an end. I was asked to treat the physician in question, and am doing so to-day—happy to say all reaction of malignancy has disappeared. Conversation—questions—answers till past midnight. This event was another epoch for future users of the pendul on this side of the water. The pendul diagnosis had "stood up" when checked against by the leading users of aetheronics and electronics in America.

The next day Dr. Martin shared her allotted hour on the Convention platform with me. I gave a brief history of how Dr. Selige contacted the pendul while visiting Germany; brought home what knowledge he could garner; then set to work to simplify the technique; cited a dozen or more cases and the therapy involved—diagnosis—vegetable and herb teas—internal

and external hygiene—selection of harmonious foods, &c.—and in behalf of Dr. Selige and myself offered all we had learned from experience to those who were ready and could take it to use.

Monday following, the Electronic Research Association convened and, while not a member, I stayed over on invitation. Dr. Burnett, in his opening address, told of visiting the writer, and the pendul demonstration he had witnessed with highly complimentary remarks to the usage of the pendul and its operator.

I was asked to do a diagnosis on a lady physician that night in the room of Drs. Albert and Cora Belle Molyneux, of Jersey City, N.J. There were even more assembled than at the previous demonstration, and again the pendul diagnosis "stood up" for recognition as scientific. Being checked against by users of scientific instruments—to such an extent that some twenty members of these conventions ordered from Dr. Selige his primary lessons.

This question was asked, "Do the thoughts of the minds assembled here interfere with, or affect your finding?" Reply, "When I send forth the 'word' (ask the question out loud) and await the reactive answer I do not know you are here. Only when I look up into your faces am I cognizant of your presence." "My only request is that you refrain from talking amongst yourselves while I am operating." One person remarked, "I have never seen such power of concentration." Another question, "Do you have to face the west?" My answer, "It makes no difference to me what direction I face."

Dr. Davidson, noted psychologist and astrological diagnostician, after asking a few questions, remarked, "You have something there. I see what you do. You block out, blot out or blank the conscious mind and allow the superconscious to flow through you."

The next day Dr. Burnett delivered an address, "The Pendul Therapy versus Electronic Research Association methods," and advised all to investigate the pendul. At the night session Professor J. H. Hallberg demonstrated his short wave machine that he had recently exhibited in Vienna. The purpose of the machine is, by varying the wave length emitted, to affect the wave length of the individual and reverse the cell polarity of the individual. When Professor Hallberg had finished, Dr. Burnett asked me to go to the platform and explain to the Convention what had been explained to him about the pH values of the tissues of the body and their correction by use of the Duncan machine, which the writer used for this purpose during his visit to Augusta.

By the use of diagrams the following was explained:—The pH scale—its acid end—its alkaline end—Normal body fluids pH (hydrogen-ion concentration) about 7.35. How the cell nuclei has a certain position as normal on this scale. How the cell

cytoplasm has a certain position as normal on this scale. How the relative value position of the nuclei and cytoplasm on the pH scale may converge (move closer together relatively on this scale) so as to disturb the electrolytic balance of the cell, or diverge (move further apart relatively on this scale) and likewise disturb the electrolytic balance of the cell. How the cell either in its normal position in its relation on the pH scale, or converged in values, or diverged as to values, may as a whole move towards the acid end of the scale or towards the alkali end of the scale—disturbing the electrolytic relative balance upon which harmonious life vibration depends. How the nuclei may move in the direction (on the scale) of, or towards the relative position of, the cytoplasm and at the same time the cytoplasm may move far enough in the direction of the relative position of the nuclei and continue in that value direction so as to cross over the point of relative position of the nuclei and produce cell reversal. That convergence—divergence—reversal—movement towards the acid end of the scale or movement towards the alkali end of the scale may be either systemic or may be localized in a certain tissue or organ—or tissues and organs.

That with the pendul the writer determines the pH condition of the tissues, organs, circulatory fluids, cell nuclei, cell cytoplasm, &c. With Duncan machine any of these having pH imbalance of the cell electrolyte may be moved in direction of normal balance. The pendul indicates at what point the Duncan electrode shall be applied—how long the application—the type of applicator. In all cases of cancer will be found cell reversal, either systemic or localized and this can be corrected by applying the Duncan electrode over the coccyx, at the base of the spine. Later on some clinical evidence on this point, and other usages, will be offered.

Comments: Dr. Burnett, "That work is fifty years ahead of what we have to work with." Mrs. Ann McRoberts Hanks, another daughter of Dr. McRoberts, "Had my father been on that platform he would have used the same language you used; explained in the same words." The wife of a physician, "When Professor Hallberg was passing his antenna over the heads of the audience, I saw lights flashing from your head and knew you had something to say." Psychic—no doubt!

In conversation with Dr. Burnett I remarked, "Doctor, you know that I know nothing of aetheronics." To which he replied, "You are aetheronics."

Thus ended the first presentation of the pendul-radioscope to the aetheronic-electronic scientists of America by the humble pupil of Dr. Adolphe Selige, of Miami, Fla., my beloved teacher and co-worker, yea, even more. Happy are we that he received the recognition he so richly deserved for his monumental work of sacrifice and painstaking care, for the American Association of Medico-Physical Research created a section of Radioscopic

Research and made this servant of mankind the chairman, as our first recognition and the pendul's first official recognition in America.

Leaving Chicago in company with Dr. Madge Stephens, we spent two days in "round table" at the home of Dr. Emma Martin, in Otterbein, Ind. That wonderful little woman—that big soul.

Dr. Martin had a patient—we checked him for malignancy of the tail of the pancreas—health reaction of the tail of the pancreas zero, all the pendul would do was to "quiver"—no movement. We saw the patient that afternoon. Gave him bi-manual manipulation. Next morning we assembled around the table and checked the health reaction of the tail of the pancreas—registered 6 per cent. Inquiring if the two doctors present would like to see the health reaction of the affected part raised with the pendul. The answer was affirmative.

Concentrating on the patient—on the tail of his pancreas—holding the concept and sending forth this word, "Normalize the health and function of Chas. S——'s tail of pancreas"—repeating—repeating—as the pendul went into action. In about three minutes it was racing in a horizontal position. Dr. Martin said, "Watch the pendul go." At this time she was asked, "Check now for health reaction." Dr. Martin said, "I cannot believe it." To which I replied, "You will have to believe it or *throw overboard* all you have been doing." Turning to Dr. Stephens I asked, "What do you get?" Dr. Stephens replied, "89 per cent." Dr. Martin concurred.

We had before us the specimen of one of my patients, Hazel Smith, Martinez, Ga., a girl of 11, hardening from the top of the sacro-iliac down to her feet—a form of petrification—also induration had set in in the arms. We diagnosed and agreed—then we agreed as to, and on, the concept and broadcasted a treatment to this child in Georgia. Stopped off at Indianapolis, Ind., to see Dr. H. E. Crum, who has been, and is doing, some remarkable work. Diagnosing and treating by broadcasting, by sending forth the "spoken word," which returns to its affinity vibration. Dr. Crum has six operators in his clinic besides himself and wife. By broadcasting he heals, corrects hip and sacro-iliac lesions, changes the quality of water in wells 100 miles distance (this is not hearsay, I read the letters from people for whom he had performed this service. Not one, but many). By this method he has also rid a farm of ants; this letter I also read.

When I asked Dr. Crum if he thought it advisable for me to take up the study of electronics, Dr. Crum replied, "Not unless you wish to go backwards."

The next question, "Do I need your machine to do broadcasting?" To which Dr. Crum replied, "No. You can do with your mind what others require their minds plus the machine to do."

Arriving home Sunday afternoon my wife advised that the father of my petrification case had been calling since Thursday and that the child was worse. Taking the pendul-radioscope from my bag and checking, I said, "Not worse, but a severe reaction is going on." We went out to see the patient, and this is the condition found:—Left hip looked like boiling water had been poured upon it—water blisters—induration-petrification breaking down into pus—local inflammation—congestion—swelling—systemic temperature about 102. Asked when this reaction started, was advised it started *Thursday*. The day we broadcasted treatment from Otterbein, Ind. Previous to this had broken down large areas—of what has been analyzed as calcium carbonate—which dissolved in acid leaves a skeletal residue resembling embryonic bone formation—in the thigh area, front. When this begins to break down, the rock formation forces its way through the skin, setting up inflammation, breaking down the skin tissue, and pus discharges through the lesion. Finally the total skin area slowly, putrefactively sluffs and all the petrifying matter discharges itself as pus, after which skin tissues begin to build up from the muscles. On several occasions fragmentary pieces have been ejected before breaking down into pus.

Before coming to me this child had made the rounds to various doctors, hospitals and institutes, to be told that nothing could be done. After two years' work with my regular regime, with very slow results, by the use of the Duncan machine normalizing the pH values of the cells and media, this condition began to break down. First right leg, then left leg, now left hip, and it seems as though the right hip is waiting for the left one to finish its process. At the present time all the treatment being administered is the Duncan machine and harmonious foods. Under this regime the patient is not only relieving the body of this calcareous matter but has put on seven pounds in the last six weeks. But at this point I will say that Duncan machine or no Duncan machine, this work could not have been accomplished save for the indication of the pendul. The Duncan machine without the pendul and an efficient operator would be worse than useless. May I digress at this point to say a word. I have no interest in the Duncan machine, other than the one I own, but would not take 5,000 dollars if I could not duplicate. Dr. Duncan is, or was, a woman physician who built a modified form of violet ray machine, and she, for its use and sale, has been persecuted, kidnapped, thrown into jail, and the last I heard of her had been "railroaded" into the Asylum for the Insane. As I understand it, no more of the Duncan machines are available. This explanation, lest someone may think I have some monetary interest in this machine, or an ulterior motive in my praise for it—I reiterate—in my opinion it would be useless—worse than useless—without the pendul as my guide.

My regime is: Diagnosis—and as is diagnosis, so is the cure, because to diagnose anything is to cure it. Teas—made from vegetables, flowers, herbs, trees, &c.

A tea brewed for a specific purpose and given for a certain intent will produce the desired results.

Cleanse and heal the colon—open the gall bladder and bile duct if clogged. Remove the waste from the colon as fast as it is thrown down.

By means of baths open the pores of the skin for elimination. For this I use Hydrochloric Acid, Epsom Salts, Sodium Chloride, Sea Salt, Soda, Sal Ammoniac, Mustard, Vinegar, Household Ammonia, Glauber Salts—Vegetable matter diluted. Lemons, Pine Tops, Tub and Vapour Baths.

Massage, Stretching, Breathing, Packs, &c. All natural methods.

Check the harmonious foods to the patient's condition from time to time.

When a regime produces the required change in the media and tissue, a change of regime is necessary.

Normalize the cells on the pH scale.

Normalize by the spoken word broadcasted.

Always the detritus must be removed and the mineral imbalance must be corrected by vegetable matter salts replacement.

The electrolytic integrity of the cell must be re-balanced and maintained.

Emotional stress—that great self-suicide factor (unintentional as it may be) must be eliminated.

NOTES AND NEWS

The subject of dowsing has been raised several times in the House of Commons during the last few weeks in connection with rural water supply.

On June 23rd Mr. Perkins asked the Minister of Health whether it was his policy to encourage rural district councils to make use of the services of dowisers in outlying areas.

Mr. Elliot replied that the technical methods to be adopted in the preparation of schemes of water supply are primarily the responsibility of the local authorities.

On the same day Mr. Quibell sought much the same information in a longer question, but was referred in a written answer to the reply to Mr. Perkins.

On July 20th during a discussion on the Civil Estimates, Department of Health, Scotland, Mr. Macquisten said "In the country areas all that is necessary is to put down a two-inch bore under the directions of a good 'dowser' and up will come the water." Later on Mr. Quibell said "Could not the

Ministry encourage the use of dowzers to find water supplies in those remote villages? I know that in many areas they have been successful where water engineers have failed."

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Major de Montmorency (B.S.D.) writes :—" I spent Whitsuntide at Gogmagog, near Cambridge, and there I had an opportunity of putting the mumetal rod to the test. Some twenty-seven years ago I located a well which has supplied three cottages with an abundant flow of water ever since. Now, although I located this well in 1911, I did not, at the time, gauge the depth. On Whitsuntide, with my mumetal rod, I found that the water was actually 78 feet below the surface of the ground, and this proved to be quite accurate. I also found the correct depth of two more wells."

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Mr. E. R. Thomas (B.S.D.) writes :—" Here are two of my recent experiences. My first was to find water enough for modern conveniences, plus tennis lawn and car washing. In this I was successful. My depth given was 85ft.-90ft. Water found at 85ft. Unable to work at 89ft. 6in. owing to volume of water. My estimation for same covering myself for error was 200 gallons per hour. Actual flow of water 300 gallons per hour.

"My second was on the 29th May in pouring rain. This was exceptionally interesting. The gentleman who called on me on behalf of a lady who wished my services did *not* believe in divining. On arriving at the spot I was told the well had run dry. Commencing my work, I immediately discovered plenty of water, to my estimation at a depth of 50ft. Questioning the lady as to the present depth of the well, I was told it was 40ft. with a 6ft. bore, total 46ft.; this only left 4ft. to play with. With their assistance I opened the well, and sounding same found it was actually 33ft., plus 6ft. bore, total 39ft. This, of course, was a surprise for them. After all this, I decided to trace the spring as far as possible to show the non-believer all was correct. Starting at the top of the field, I made my way towards the road, the way the spring flowed. Crossing the road and gaining permission to traverse someone's property, to the surprise of the non-believer the spring burst out of the bank. I had already given my estimation at 730 gallons per hour. This was very near the mark, for the spring was like a small brook. This, I am sure, must have convinced the non-believer, for he never commented on any doubt on the way back."

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Mr. C. R. Wright (B.S.D.) sends the following :—" The bore at the junction of the two streams (see his article in *B.S.D.J.*

19, p. 114) has now been completed, and the test-run of 72 hours' continuous pumping finished on Friday last. The constant yield after the test was 12,000 gallons per hour. This, I think, completes the information you require.

"Since writing last, Mr. Smith and myself located for a boring at Avebury (Wilts.). As it was a small supply for a farm, quantity was not important. We selected what we considered the best spot on the property and estimated a good yield (about 1,000 gallons per hour) at about 60ft. depth.

"A 4in. borehole was drilled, water struck at 42ft., which rose to 28ft. from the surface. The boring was entirely in chalk of varying hardness, the water found beneath a seam about 3ft. thick, of a soft, sticky chalk.

"However, the site was too far away from where it was required, and the farmer estimated a new boring where the water is required would be cheaper than piping the supply. He also thought dowsing a fallacy, and put down his second borehole without a dowser's aid. He has already gone 15ft. below the seam where water was found, and his borehole is still dry. He is still boring, but I understand he is seriously considering that perhaps after all a dowser would have been helpful."

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Mr. J. A. Mitchell (B.S.D.) writes :—"Personally I am a firm believer in the written 'sample.' You will understand this perhaps if I relate my own case. Some 14 years ago I lost the use of my legs, and different doctors diagnosed gout, muscular rheumatism and rheumatoid arthritis. I was beaten from pillar to post and got no better—continuous pain, swelling of the joints—and was unable to hobble about except with the aid of two sticks; all types of medicines, electrical treatment and massage were used, and, except for a few months after I had been home, I got steadily worse. Mainly as an amusement I had been reading people's ailments by colours, and gradually introduced the written 'sample' with, apparently, success. Despairing of the doctors, I began to test myself in the same way, gathered from the 'replies' received the doctors were much astray and followed what the pendulum and rod indicated. This began some eighteen months ago and I have become steadily better. I have now lost all the swellings and all the pain and get about like a two-year-old. I am tired of telling people how it was managed—I am almost inundated by those who want me to test them. Out at dinner it is 'Have you brought your pendulum?' and so on. Forgive this intrusion of what is purely personal, but it explains my belief in the written 'sample.'"

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A special souvenir supplement of the *Stroud News* of April 29th contains a description of the new swimming pool at Strat-

ford Park. Water is supplied from a 60ft. borehole, located with the help of a water diviner. It is 120 yards from the pool, and yields 1,250 gallons per hour.

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The *Stratford-upon-Avon Herald* of April 29th states that at a meeting of the Shipton-on-Stour R.D.C. the architect reported that Mr. F. Ball had divined water at the Newbold-on-Stour housing site. A tender from Messrs. Ball Bros. for sinking a well had been accepted (see *B.S.D.J* 20, p. 193).

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According to an article in the *Ripon Gazette and Observer* of May 5th, Mr. Lincoln Tootill, the well-known water diviner of Harwood, Bolton, had been employed by the Housing and Public Health Committee of the Ripon-Pateley Council to find water, and had reported on several sites.

The *Evening News* of July 14th reported that the same diviner assisted in the location of an old well in the premises of a Bolton garage company, a valuable discovery in view of the water restrictions which had been imposed by the Bolton Corporation.

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The *Belfast News Letter* of May 11th shows a picture of Andrew Island, of Loughinisland, using a hazel rod. He is well known in the district for his water divining powers.

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The *Midland Daily Telegraph* of May 12th contained a picture of Mr. T. Garrett, a South Warwickshire water diviner, finding water for the County Greyhound Stadium with a piece of eight-gauge copper wire.

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According to the *Lincolnshire Echo* of May 18th the Horn-castle R.D.C. decided by 14 votes to two to engage a water diviner to assist them in solving the problem of their water supplies. It appears that a geologist from Sheffield, Professor Fearnside, had reported that he could not find an abundant source of supply, and that Mr. A. E. Dunham, the Chairman, had been recommended by the Minister of Health at an interview to obtain the services of a water engineer to report on the possibility of providing a supply for the various villages.

The neighbouring R.D.C. of Welton had previously employed water diviners with considerable success. The Council having bored without result, the Clerk of the Council took a diviner to the locality, who indicated a spot about fifteen yards from the bore, where an ample supply was found. The contractor lost his bore tool down the crevice, so another diviner was consulted, who found abundant supplies at two points close to the second bore.

Captain Crookshank, M.P. for the Gainsborough Division, was present when the diviners made their locations and subsequently opened the water works.

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According to the *North Devon Journal* of May 19th the North Devon Joint Isolation Hospital Committee had decided to employ a water diviner in connection with an additional water supply for the hospital.

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In the *Northern Echo* of May 28th the death is recorded of Mr. Matthew Edward Stones, of Arkengarthdale, who was well known as a water diviner. There was a long report of his funeral in the *Darlington Times* of June 4th.

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The *Montgomery County Times* of May 28th, referring to a meeting of the Llanfyllin Area Guardians Committee, states that Mr. Carr, the County Architect, had employed the services of a water diviner in connection with the Llanfyllin Institution, which was very short of water. Three wells were to be sunk and three springs located by the diviner.

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The *Bridport News* of June 3rd reports a meeting of the Beaminster Rural Council at which a discussion on the efficacy of water divining took place. The advice of two diviners had been followed hitherto without success in connection with a new housing site at Melplash. Mr. F. Saunders, himself a diviner, and Mr. G. D. Roper both spoke in favour of water divining, the latter saying that he had sunk seven different wells on his estate and in only one case was the diviner out, and then only by two feet.

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According to the *Yorkshire Herald* of June 4th Yearsley is in dire need of a water supply, and the Easingwold R.D.C. has agreed to the engagement of a water diviner.

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There is an article in the *Daily Mirror* of June 7th on John Butler, of Tondy, Ogmere Vale, who is stated to be Wales's foremost water and mineral diviner. A picture shows him using a twig.

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The *Leicester Evening Mail* of June 8th contained an article about Mr. W. E. Chaplin (B.S.D.), who had been tracing remains at Ulverscroft Priory.

The *Belfast Telegraph* of June 8th relates that Mr. John Moore, B.Sc., Town Surveyor, stated at a meeting of the Whitehead Urban Council that he was obtaining the services of a water diviner to go over the catchment area near the reservoir with a view to finding an additional supply.

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The *Lincolnshire Chronicle and Leader* of June 11th reports the death of Mr. Tom East, of Heighington, who was well known in Lincolnshire as a water diviner.

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According to the *Somerset County Herald* of June 11th the Long Sutton Parish Council agreed to engage a local water diviner to survey an area of land belonging to Mr. A. G. Haine, one of the councillors, in connection with a serious shortage of water.

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The *Daily Sketch* of June 18th and 21st contained articles about the discovery of gypsum by Edward Dixon, a diviner, at the village of Bunny in Nottinghamshire. It is stated that he discovered deposits of gypsum on his farm and sold the rights to a Stretford firm. A £100,000 factory is now being built on Mr. Dixon's land.

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The *Brighton Herald* of July 2nd contained an account of an interview with Major C. A. Pogson. The article tells how a licence under the Petroleum Production Act of 1934 was granted to Major Pogson and Mr. E. H. Cunningham-Craig, the well-known oil geologist, under the title of the Midlothian Petroleum Syndicate, but was transferred by arrangement to the Anglo-American Oil Company.

The *Daily Telegraph* of June 28th reported the discovery of oil at Dalkeith in the oil sands at a depth of 1,733 to 1,760 feet.

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The *South Wales Evening Post* of July 4th relates in a short article how Mr. Herbert Griffiths, engineer, of Trebanos, discovered a strong spring of water on a farm which had suffered from the drought. Pumping plant and a large storage tank were installed, the occasion being celebrated by a dinner at the farm.

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At an interview by Mr. F. H. Radford, of the *Reading Evening Gazette* (reported on July 20th), with Professor H. L. Hawkins on the water shortage, the latter is reported to have said that he had no faith in water diviners but would far sooner rely on a knowledge of geology.

SOME BOOKS ON DOWSING AND HUMAN RADIATION

- The Divining Rod*, by Sir William Barrett and Theodore Besterman: Methuen, 7/6.
- Water Divining*, by Theodore Besterman: Methuen, 7/6.
- Water Diviners and their Methods*, by H. Mager (translation): Bell, 16/-.
- The Modern Dowser*, by Le Vicomte Henry de France (translation): 2nd Edition, Bell, 4/6.
- The Art of Water Finding*, by M. E. Pogson: obtainable from the President, B.S.D., post free, 1/8.
- Local Variations in a Penetrating Radiation and their Connection with Water Divining*, by H. M. Budgett: obtainable from the President, B.S.D., -/6.
- The Human Atmosphere (the Aura)*, by W. J. Kilner: Kegan Paul.
- The Origin and Properties of the Human Aura*, by Oscar Bagnall: Kegan Paul.
- Les Sourciers et leurs Procédés*, by H. Mager.
- Traité complet des secrets de la Baguette et de la Pendule des Sourciers*, by Frère Padey, 65 fr.
- Le Sourcier Moderne*, by Henry de France, 5th Edition, 10 fr.
- Comment j'opère*, by Abbé Mermet, 4th and enlarged edition, 25 fr.
- La Radiesthésie* (explaining Abbé Bouly's method), by M. A. Capron, 15 fr.
- Comment devenir Sourcier*, by Armand Viré, 18 fr.
- Tu Seras Sourcier*, by Emile Christophe, 20 fr.
- Manuel théorique et pratique de Radiesthésie*, by René Lacroix-à-l'Henri: Henri Dangles, 38 rue de Moscou, Paris (8^e), 20 fr.
- La Radio-Tellurie*, by M. Larvaron and Dr. J. Regnault: Maison Deyrolle, 46 rue du Bac, Paris, 18 fr.
- Essai sur les Rayonnements de l'Homme et des Etres vivants*, by C. Voillaume.
- Cours de Radiesthésie*, by Henri Lemonnier: Maison de la Radiesthésie, 16 rue Saint-Roch, Paris.
- La Vérité sur la Radiesthésie*, by Paul Serres: Dunod, Paris.
- Le Pendule Magique*, by Madame de Mersseman: Maison de la Radiesthésie, Paris, 15 fr.
- Electricité Magnétisme Radiesthésie*, by Comte de Marsay: Maison de la Radiesthésie, Paris, 12 fr.
- Investigación de aguas subterráneas*, by Bartolomé Darder Pericás.
- Handbuch der Wünschelrute*, by Carl Graf von Klinekowsstroem and Rudolf Freiherr von Maltzahn.
- Die Wünschelrute*, by Hans Falkinger.